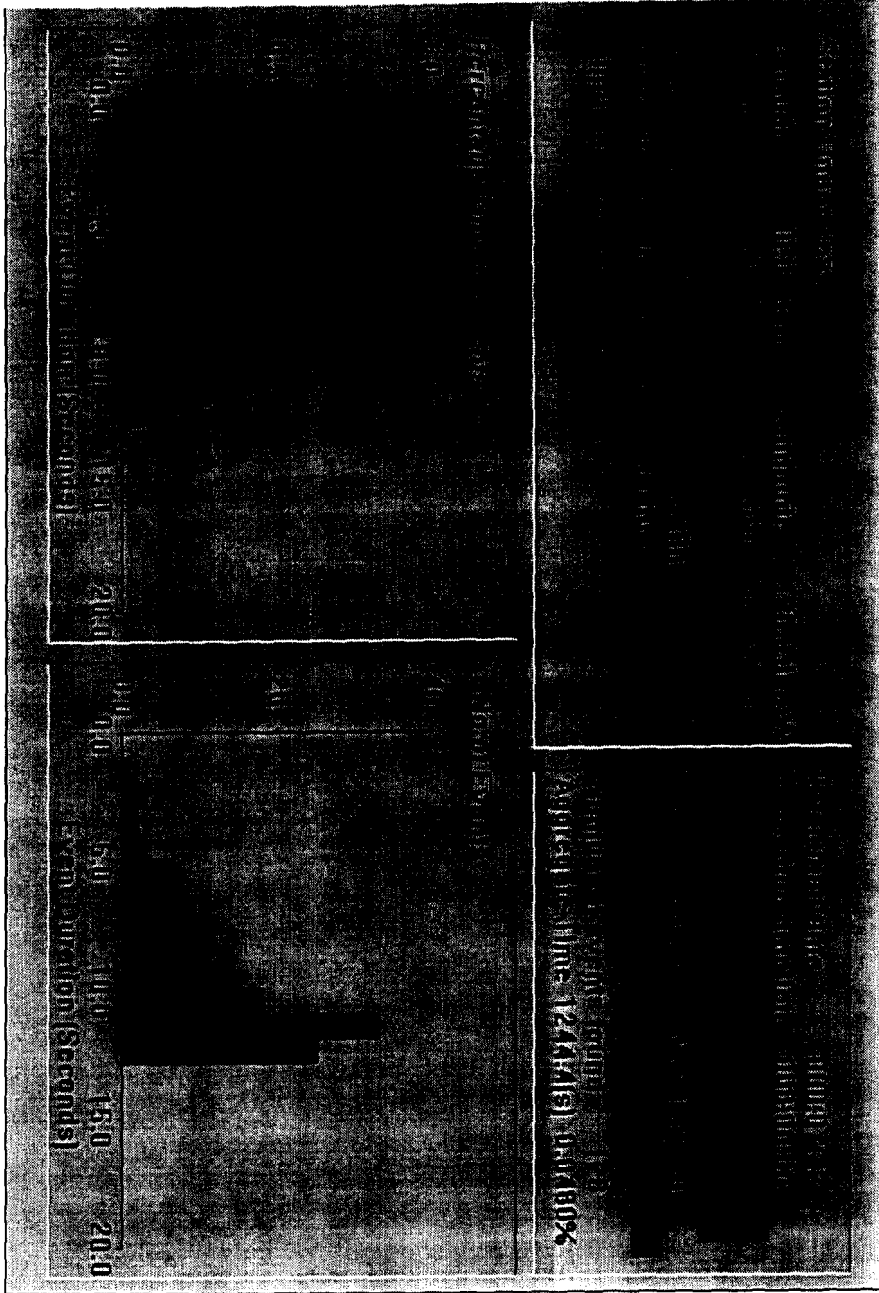
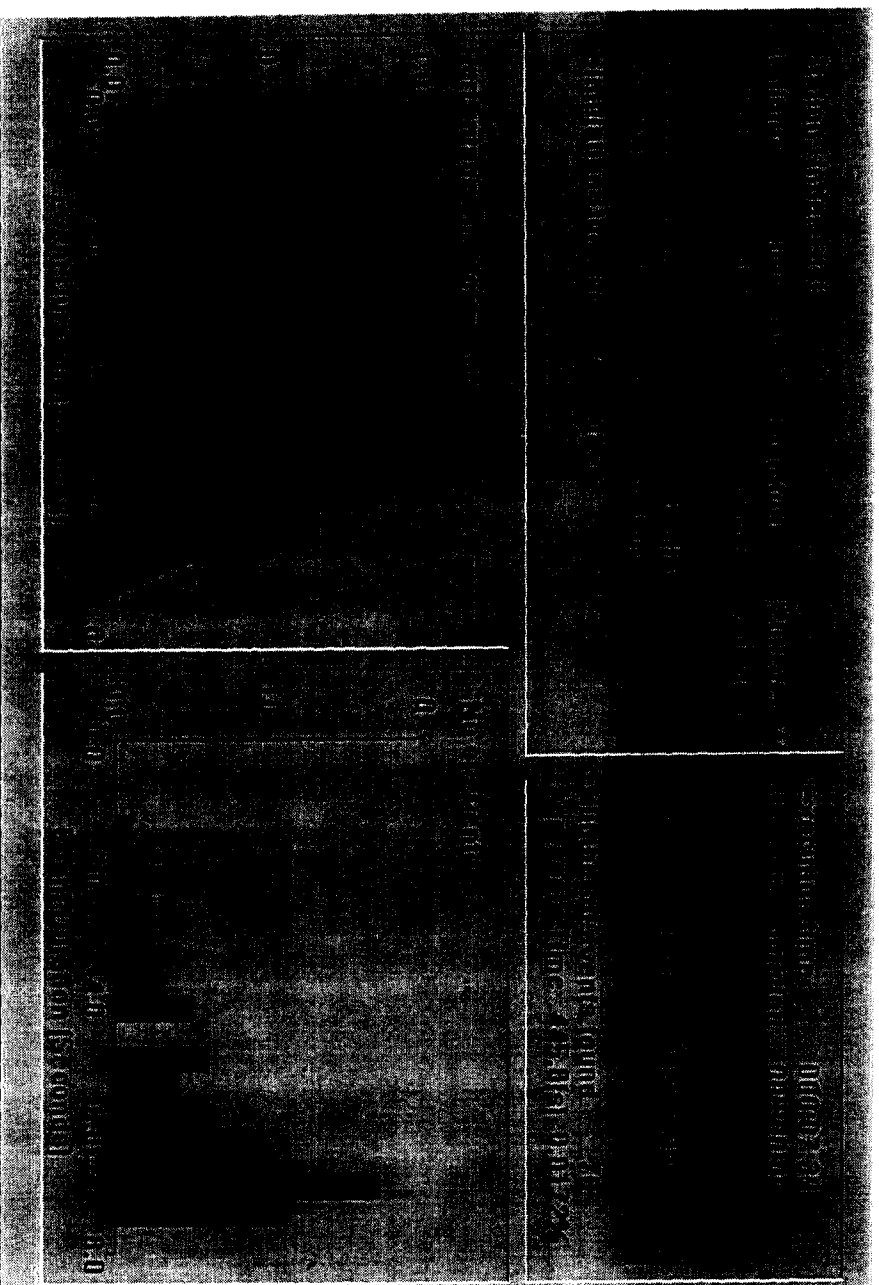


Simulation Results ($I_0/N_0 = 0.78$)



Simulation Results ($I_0/N_0 = 2.98$)



Simulation Results (1 N 148)

Station Under Test

Latitude 40.0 deg N Longitude 120.0 deg W
Altitude 0.000 Km Beamwidth 1.140 degs

Tracked Satellite Network : Astrolink
Interfering Satellite Network : Iridium
Simulation Duration 30 days

Execution time 000:07:25

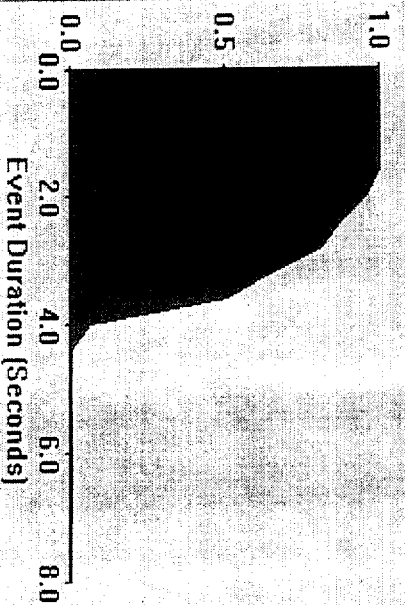
Execution time left 000:00:00

Time Simulated 030:00:00:00

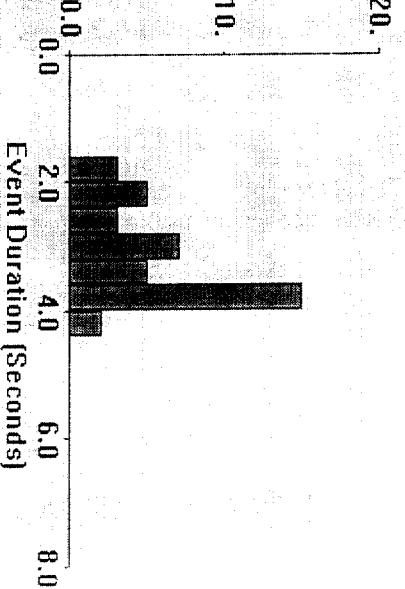
Number of events found 40

Aggregate Time 128.0[s] 0.0049%

Percentage Time of Events



No of Events



Summary of Results

CPM criteria (95/118)			Simulation Results			
			IRIDIUM		ODYSSEY	
% time not to be exceeded	I_0/N_0 (linear)	I_0/N_0 (dB)	% time occurred	Δ relative to criteria	% time occurred	Δ relative to criteria
0.87	0.06	-12.22	0.3383%	-0.5317%	0.8733	+0.0033%
0.119	0.78	-1.08	0.0480%	-0.0710%	0.1034	-0.0156%
0.0294	2.98	+4.74	0.0172%	-0.0122%	0.0329	+0.0035%
0.0004	14.8	+11.70	0.0049%	+0.0045%	0.0091	+0.0087%

Results Overview

- Uplink interference from single Iridium earth station into GSO FSS satellite meets CPM criteria with exception of $I_0/N_0=14.8$.
- May need to consider aggregate of multiple Iridium uplink earth stations into GSO FSSsatellite receiver.
- Interference events from Iridium tend to be 10 times shorter in individual event duration than from Odyssey, and five times more in number.
- Less frequency overlap with Iridium band will further reduce effect of interference.